ORBITRON

351 S. Peterson Street, Spring Green, Wisconsin USA 53588
608/588-2923 Fax 608/588-2257 Telex 262081

COMPLETE SATELLITE SYSTEMS

Orbitron is a manufacturer and distributor of complete satellite systems for the international market place. We export complete satellite systems for home and commercial use, including antennas, receivers, LNBs, feedhorns, modulators, amplifiers, cable connectors and accessories for C, Ku and S band systems. Antennas range in size from 1 to 7.3 meters. We also sell dual axis tracking systems for tracking inclined orbit and unstable satellites. In addition Orbitron offers consultation, installation and on-site training services. This includes turn key installation of SMATV and other head end systems. Orbitron enjoys a world-wide reputation for quality, performance and durability at a competitive price.

We will FAX a proforma invoice directly to you upon receiving the model and quantity of antennas or systems you desire. We will also quote your freight charge (specify air or ocean shipping). Please be as specific as possible in your request. If you need assistance we will be happy to recommend the most appropriate equipment for your location.

For further information please call Orbitron at 608-588-2923 and ask to speak to an International Sales Account Executive, or FAX 608-588-2257.

Regards,

Frank Leach
President and CEO
Orbitron International

2/19/93

Digitized by the Internet Archive
in 2024 with funding from
Amateur Radio Digital Communications, Grant 151

https://archive.org/details/orbitroncomplete00unse

ORBITRON ANTENNAS

Below is a list of the antennas available from Orbitron and their specifications. Call Orbitron for more details.

†Measured between the front Plate and Feed focus.

12/3/92

Model	Diam.		Focal length		F/D Ratio	dBI Gain C/Ku		Feed Type	Rib #	Pole Size		Powder Coat Finish	Spincli-nation Mount	Assem-bly on Pole	H/H Mount (*Optional)	Weight		Crate size (rounded up)		Cu. Ft. (rounded up)	War-ranty	UPS
	Ft.	M	In.	Cm		4.2	12.2			in.	cm.					lbs.	kg.	in.	cm			
SX7	6.7	2.0	28.8 — †28.5	73.15 — †72.4	.36	37.3	44.0	Quad	12	3.5	8.9	Yes	Yes	Yes	*Yes	91	41	AB43x14x6 C19x10x8 D15x17x22	11x36x16 49x26x21 39x44x56	7	5 yr.	Yes
SX8.5	8.3	2.5	36 — †35.75	91.4 — †90.8	.36	39.2	46.6	Button hook	12	3.5	8.9	Yes	Yes	Yes	*Yes	108	49	A15x17x31 B52x12x8 C19x10x8	39x44x72 133x31x21 49x26x21	9	5 yr.	Yes
SX10	10.0	3.0	36 — †35.75	91.4 — †90.8	.30	40.5	48.2	Quad or button hook	18	3.5	8.9	Yes	Yes	Yes	*Yes	147	67	AB65x12x8 C19x10x8 D15x17x22	166x31x21 49x26x21 39x44x56	8	5 yr.	Yes
C10	10.0	3.0	36 — †35.75	91.4 — †90.8	.30	40.5	48.2	Quad or button hook	18	3.5	8.9	Yes	Yes	Yes	*Yes	126	58	AB65x12x8 C19x10x8 D15x17x22	166x31x21 49x26x21 39x44x56	8	2 yr.	Yes
SST8	7.8	2.4	32 — †31.75	81.3 — †80.6	.34	38.5	46.4	Quad	16	3.5	8.9	Yes	Yes	Yes	*Yes	110	50	Shipped loose		N/A	5 yr.	No
SST10	10.0	3.0	43.2 — †42.56	109.7 — †108.1	.36	40.5	48.3	Quad or button hook	20	3.5	8.9	Yes	Yes	Yes	*Yes	123	56	Shipped loose		N/A	5 yr.	No
SX12	11.7	3.6	50.4 — †50.12	128.0 — †127.3	.36	42.2	49.5	Quad or button hook	18	3.5	8.9	Yes	Yes	Yes	*Yes	202	92	AB73x14x6 C31x32x10 D15x17x31 Q5x5x75	186x36x16 79x82x26 39x44x72 13x13x191	15	5 yr.	Yes
016	16.0	4.9	57.6 — †57.12	146.3 — †145	.30	44.8	52.1	Quad	24	5.5	14	Yes ribs blk. enamel	No	Yes	*Yes	820 w/HH 880	372 400	A104x28x10 B50x50x19	265x72x26 127x127x48	45	5 yr.	No
T20	20.0	6.1	108	274.3	.45	46.9	53.5	Quad	16 truss	twr	twr	Yes trusses mill fin.	No	Yes	Yes	3000	1361	A93x50x41 B93x34x34	237x127x105 237x102x105	172	5 yr.	No
T24	24.0	7.3	108	274.3	.375	47.9	53.8	Quad	16 truss	twr	twr	Yes trusses mill fin.	No	Yes	Yes	3150	1429	A93x50x41 B93x34x34	237x127x105 237x102x105	172	5 yr.	No

351 S. Peterson St., Spring Green, WI 53588 USA ■ (608) 588-2923 ■ FAX (608) 588-2257

ORBITRON

International

- Antennas
- Receivers
- LNBs
- Feed Horns
- Modulators
- Private Cable Systems
- Tracking Systems
- Installations

Complete Satellite Systems

Orbitron is a manufacturer and distributor of complete satellite systems to the international market. In addition to Orbitron antennas and receivers, these systems include electronics, cable and accessories for home, hotel, business and cable head end systems.

Orbitron also offers consulting, turn-key installation and on-site training anywhere in the world. Please indicate your FAX number when responding.

ORBITRON ANTENNAS:

Model	Diameter Ft.	Diameter M	Focal length	F/D ratio	dBI gain GHZ 4.2	dBI gain GHZ 12.2
SX7	6.7	2.0	28.8"	.36	37.3	44.0
SX8.5	8.3	2.5	36"	.36	39.2	46.6
SX10	10.0	3.0	36"	.30	40.5	48.2
C10	10.0	3.0	36"	.30	40.5	48.2
SX12	11.7	3.6	50.4"	.36	42.2	49.5
016	16.0	4.9	57.6"	.30	44.8	52.1
T20	20.0	6.1	108"	.45	46.9	53.5
T24	24.0	7.3	108"	.375	47.9	53.8

351 S. Peterson St. **Spring Green, WI 53588 USA**

1 (608) 588-2923 **FAX 1 (608) 588-2257**

ORBITRON
351 S. Peterson Street, Spring Green, Wisconsin USA 53588
608/588-2923 Fax 608/588-2257 Telex 262081

ABOUT ORBITRON INTERNATIONAL

Orbitron International is a manufacturer and distributor of complete satellite systems to the international market. It is a division of Greenbriar Products Inc., which has been in manufacturing since 1975 and is headquartered in Spring Green, Wisconsin, U.S.A.

The company has thrived in the intensely competitive satellite communications field by reacting quickly to it's changing market. Innovative product design, craftsmanship in fabrication and the production of precision, high performance products has made it possible for Orbitron to succeed not only in the US, but in the international market as well.

Complete systems for home or commercial use are the heart of their export trade. These systems include antennas, receivers, LNBs, feed horns, tracking systems, modulators, cable and accessories for C, KU and S band systems. Precision antennas range in size from 2 to 7.3 meters. Vertical elevation kits and dual axis tracking systems for tracking inclined orbit and unstable satellites are also available.

Orbitron has recently introduced its own line of international receivers. These receivers are an exceptional value, providing performance comparable to many higher priced receivers. Orbitron receivers feature built in antenna positioners with east/west limits which can be programmed, on screen, multi-language graphics, PAL GI switched modulators and IR remote control. Satellite positions can also be memorized. The receivers can receive either C, Ku or S bands. Audio and video bandwidth can be selected on most of the receivers.

Their antennas possess a number of unique innovations. Antennas from 2 to 4.9 meters are built according to the stressed frame design concept. The 6.1 meter T 20 and 7.3 meter T 24 are too large for this concept, and instead use a truss support system. The SX 12, 016, T 20, and T 24 are Orbitron's entries into the large antenna commercial market and can be used as SMATV, private cable and cable head end antennas. All of the large antennas can be built from the ground without having to use a crane. This is extremely useful in remote areas. Antennas feature a baked on, black powder coat finish and are available with stainless steel hardware. These options offer excellent protection from rust and corrosion throughout the world.

Orbitron's 2 meter to 3.6 meter antennas can be shipped via UPS through-out North America. They also can be shipped cheaply overseas via container, as they allow maximum use of container space. All antennas are available with horizon to horizon mounts to allow the antennas to sweep a full 180 degree horizon to horizon arc.

Orbitron has designed an antenna for every purpose, whether it be for the home owner or as a head end antenna for cable systems. Every Orbitron antenna demonstrates a concern with quality in manufacturing and innovation in design that guarantees superior signal reception and reliable performance.

ORBITRON

351 S. Peterson Street, Spring Green, Wisconsin USA 53588
608/588-2923 Fax 608/588-2257 Telex 262081

Consultation, installation and on site training are also offered. This includes turn-key installation of SMATV, private cable and other head end systems. International Account Executives consult with customers throughout the world on a daily and hourly basis. They can provide total systems consulting for commercial and home satellite systems and know what programming and satellites can be received in every region of the world. The sales staff knows the varying transmission and voltage standards found through-out the world and how to convert or adapt these standards for use in different regions.

Orbitron will FAX a proforma invoice directly to the customer upon receiving the model and quantity of antennas and systems the customer desires. They will also quote freight charges. Air or ocean shipping should be specified. Customers should be as specific as possible in their request. If the customer needs assistance Orbitron will be happy to recommend the most appropriate equipment for their location.

For sales assistance call Orbitron at (608) 588-2923 or FAX (608) 588-2257. Contact Orbitron today and find out why Orbitron enjoys a world-wide reputation for quality, performance and durability at a competitive price.

ORBITRON

the SX7

PRECISION ANTENNA

The SX7 is designed to appeal to the growing number of consumers looking for a space saving yet precise and dependable antenna. The Orbitron SX7 features the same excellent performance and durability found in every Orbitron antenna. The SX7's quad leg feed support, die formed mesh panels and parabolic stressed frame construction assure precise C/Ku reception and a sharp clear picture. Horizon-to-horizon mounts are optional with the SX7. The SX7 will appeal to the customer looking for an unobtrusive, low priced and well designed antenna offering excellent reception.

r more information contact:

SPECIFICATIONS:

Diameter:	**6.7′**	**(2.0m)**
Focal length:	**28.8″**	**(73.2cm)**
(Measured between front plate and feed focus: 28.50″ 72.4cm)		
F/D ratio:	**.36**	
Gain at 4.2 GHZ:	**37.3 dBI**	
Gain at 12.2 GHZ:	**44.0 dBI**	
Pole size:	**3.5″ O.D.**	**(8.9cm)**
Shipping weight:	**91 lbs.**	**(41 kg)**
Crate size AB:	**43″ x 14″ x 6″**	**(110 x 36 x 16cm)**
C:	**19″ x 10″ x 8″**	**(49 x 26 x 21cm)**
D:	**15″ x 17″ x 22″**	**(39 x 44 x 56cm)**

Design

ORBITRON A Division of Greenbriar Products, Inc.
351 S. Peterson St., Spring Green, WI 53588 USA
(608) 588-2923 FAX (608) 588-2257 Telex 262081

The SX7 FEATURING...

ORBITRON Design

Orbitron's high standard of design has produced an aesthetically pleasing and reliable antenna that produces a sharp, sparkle free picture. Some features that contribute to the success of the Orbitron design are:

Parabolic stressed frame construction is simply the relationship between the design of the ribs and the method of attaching them to the other structural members of the antenna. The ribs are formed so that as the hub is tightened the resulting tension on the ribs forms a rigid, true parabolic antenna.

The steel "Quick Hub" allows speedy single wrench assembly. The hub assembly holds the center of all 12 extruded aluminum ribs in position, forming a precise, parabolic antenna.

Shown above is a profile view of the actuator, beam extension plate, polar mount hub and antenna dish.

A sturdy quad leg feed support provides precise centering of the feed horn in addition to providing greater antenna strength.

"Spinclination", unique to Orbitron, allows accurate and precise declination setting by simply rotating the antenna to the correct latitude setting found on the declination scale on the polar tube.

Die formed, double curvature mesh panels help provide the parabolic accuracy necessary to provide sharp C/Ku reception.

A baked-on black powder coat finish is used on all parts of the SX7. This coating offers excellent protection from rust and corrosion under most weather conditions.

A close-up view of Orbitron's Mesh-Lok design shows how the mesh clip holds the mesh panel in place and how the mesh fits into the rib groove.

The mesh-lock rib design used on the SX7 forces the mesh against the top of the rib groove for better mesh retention. Aluminum clips then snap into the bottom of the mesh groove to lock the mesh in place.

Orbitron antennas are UPS shippable anywhere in the USA or Canada. Dealers appreciate the convenience of next day delivery and low UPS rates.

A 5 year limited warranty covers defects in materials and workmanship.

Orbitron's horizon-to-horizon mount, shown here, is an available option for this and other Orbitron antennas.

An optional horizon-to-horizon mount is available for the SX7. This mount is capable of interfacing with all popular receivers and features ± 0 to .14 degrees pointing accuracy. The mount has snow dumping capability and won't freeze up in winter.

ORBITRON A Division of Greenbriar Products, Inc.
351 S. Peterson St., Spring Green, WI 53588 USA
(608) 588-2923 FAX (608) 588-2257 Telex 262081

ORBITRON

the SX8.5

PRECISION ANTENNA

Many suburban and urban homes lack the space for a large dish. The home owner may prefer a smaller, less obtrusive dish or may live in an area that is restrictively zoned. Orbitron innovation has produced an answer to these needs. The Orbitron SX8.5 antenna's innovative design combines both high performance and a competitive low price in a small package. Orbitron's parabolic stressed frame construction and die formed, double curvature mesh panels provide the parabolic accuracy needed to provide the excellent picture quality of the SX8.5. The superiority of Orbitron's design and the craftsmanship shown in every Orbitron antenna make the SX8.5 possible. The SX8.5 will appeal to anyone looking for an unobtrusive, low priced antenna offering a sharp, clear picture.

r more information contact:

SPECIFICATIONS:

Diameter:	**8.3′**	**(2.5m)**
Focal length:	**36″**	**(91.4cm)**
(Measured between front plate and feed focus: 35.75″ 90.8cm)		
F/D ratio:	**.36**	
Gain at 4.2 GHZ:	**39.2 dBI**	
Gain at 12.2 GHZ:	**46.6 dBI**	
Pole size:	**3.5″ O.D.**	**(8.9cm)**
Shipping weight:	**101 lbs.**	**(46 kg)**
Crate size A:	**15″ x 17″ x 31″**	**(39 x 44 x 72cm)**
B:	**52″ x 12″ x 8″**	**(133 x 31 x 21cm)**
C:	**19″ x 10″ x 8″**	**(49 x 26 x 21cm)**

Innovation

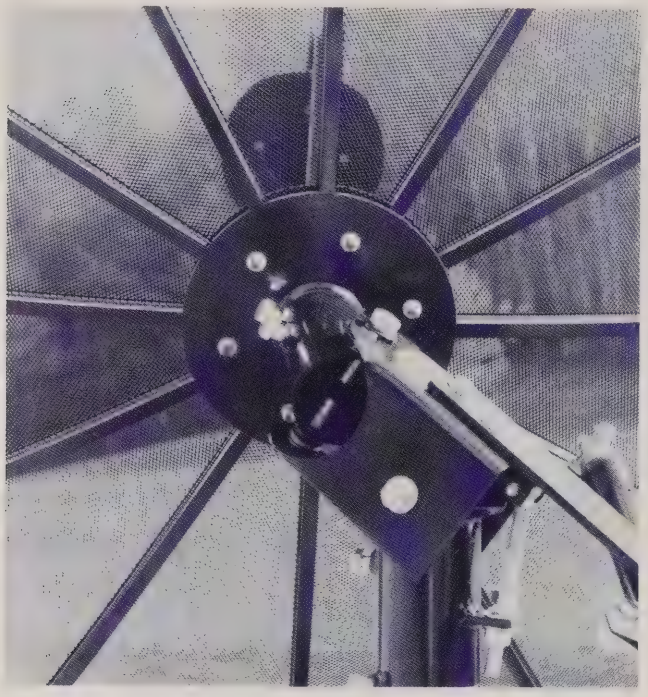
ORBITRON A Division of Greenbriar Products, Inc.
351 S. Peterson St., Spring Green, WI 53588 USA
(608) 588-2923 FAX (608) 588-2257 Telex 262081

THE SX8.5 FEATURING...

ORBITRON Innovation

Orbitron innovation has produced a relatively small, sturdy, high performance antenna that provides superior reception. Contributing to the success of the SX8.5 are the following features:

Parabolic stressed frame construction is the primary element of Orbitron's innovative design. Stressed frame construction is dependent on the relationship between the design of the antenna ribs and method of attaching them to the hub and perimeter ring. After the ribs are anchored to the perimeter ring the hub is tightened, resulting in increased tension on the ribs. This forms a rigid, true parabolic antenna.



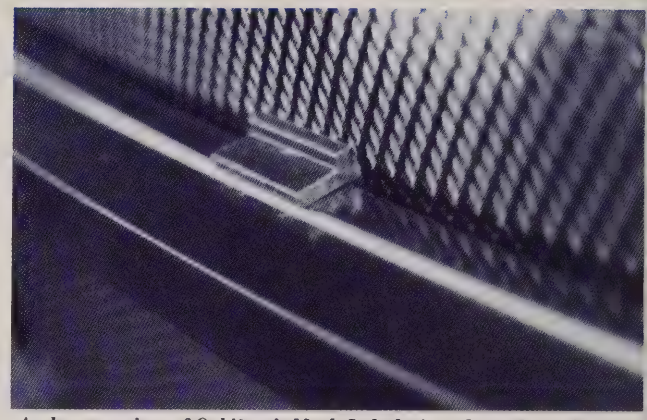
A rear view of the SX8.5 showing the polar mount, hub, and feed.

The steel "quick hub" allows speedy, single wrench assembly. The hub assembly holds the center of all 12 extruded aluminum ribs in position, forming an accurate, parabolic antenna.

A sturdy button-hook feed support provides precise centering of the feed horn.

"Spinclination", another innovation unique to Orbitron, allows accurate and precise declination setting. This is done by simply rotating the antenna to the correct latitude setting on the polar tube declination scale.

Die forming of expanded aluminum mesh forms a parabola into the mesh. These double curvature mesh panels help insure the parabolic accuracy necessary to provide sharp C/Ku reception.



A close-up view of Orbitron's Mesh-Lok design shows how the mesh clip holds the mesh panel in place and how the mesh fits into the rib groove.

The mesh-lok rib design of the SX8.5 forces the mesh against the top of the rib groove for better mesh retention. Clips then snap into the bottom of the mesh grooves to lock the mesh in place.

A baked-on black powder coat finish is used on all parts of the SX8.5. This coating offers excellent protection from rust and corrosion under extreme weather conditions.

An optional horizon-to-horizon mount is available for the SX8.5. This mount is capable of interfacing with all popular receivers and features ± 0 to .14 degrees pointing accuracy. The mount has snow dumping capability and will not freeze up in winter.

Orbitron's horizon-to-horizon mount, shown here, is an available option for this and other Orbitron antennas.

Orbitron antennas are UPS shippable in the USA or Canada.

A 5 year limited warranty covers defects in material and workmanship.

ORBITRON A Division of Greenbriar Products, Inc.
351 S. Peterson St., Spring Green, WI 53588 USA
(608) 588-2923 FAX (608) 588-2257 Telex 262081

ORBITRON

the C 10

PRECISION ANTENNA

An economical use of materials and the economy of means made possible by Orbitron design has resulted in a competitively priced antenna, the C10. Orbitron's stressed frame construction and spinclination mount are simple and direct methods of establishing parabolic accuracy in the antenna structure and of providing a sturdy, accurate mounting system at a minimal cost. In addition, the antenna incorporates durable PVC in the construction of its specially designed zip-in-mesh retainers. These retainers not only save on cost to the public but also save the installer valuable time.

The C10's deep dish design has resulted in superior TI or terrestrial interference rejection. This interference, caused by ground based microwave signals, is a problem in many areas. The C10's other performance characteristics are comparable to many higher priced antennas. Purchase the C10 and purchase a high performance antenna at a low price.

SPECIFICATIONS:

Diameter:	10.0	(3.0m)
Focal Length:	36″	(91.4cm)
F/D Ratio:	.30	
Gain at 4.2 GHZ:	40.5 dBI	
Gain at 12.2 GHZ:	48.2 dBI	
Pole Size:	3.5″ O.D.	(8.9cm)
Shipping Weight:	129 lbs.	(59kg)
Crate Size: AB:	65″ x 14″ x 8″	(166 x 36 x 21cm)
C:	19″ x 10″ x 8″	(49 x 26 x 21cm)
D:	16″ x 16″ x 22″	(41 x 41 x 56cm)

For More Information Contact:

Economy

ORBITRON 351 S. Peterson St., Spring Green, WI 53588
(608) 588-2923 FAX (608) 588-2257 TELEX 262081

THE C10, FEATURING...

ORBITRON Economy

Orbitron's C10 is both an economical and efficient antenna. The following features illustrate Orbitron's success in uniting quality and a competitive low price.

The superior TI rejection shown by the C10 is due to its deep dish design. The absence of terrestrial interference helps to provide the picture quality Orbitron is known for.

Stressed frame construction insures a true parabolic antenna. A true parabolic shape is necessary for optimal signal reception and this method of construction is a simple and effective way to achieve it. The formed ribs are fastened to the perimeter ring and the hub is tightened, resulting in increased tension on the ribs. This forms a rigid, true parabolic antenna.

The steel "quick hub" allows speedy, single wrench assembly. The hub assembly locates the ribs precisely, forming an accurate antenna. The hub design, in conjunction with Orbitron's unique spinclination mount, allows the antenna to be rotated for on-pole mesh installation and accurate setting of the declination scale.

A sturdy button-hook or quad leg feed support is available for the C10. Either of these feed supports will provide precise centering of the feed horn.

"Spinclination" is Orbitron's unique method of setting antenna declination. This is done by simply rotating the antenna to the correct latitude, found on the polar tube's declination scale.

Die forming of expanded aluminum mesh forms a double curvature mesh panel. This helps to insure the parabolic accuracy necessary to provide sharp C/Ku reception.

A view of the mesh retaining, PVC zip strip.

The Zip-Rib design is a distinct feature of the C10. The mesh panels are inserted into the perimeter ring groove and centered on the rib. The PVC mesh lock strips are then zipped into the rib groove to hold the mesh in place. This is a quick and reliable method of mesh retention.

Built-in rib connectors are located in the end of each rib. These encapsulated nuts speed assembly. The use of a single teflon coated bolt instead of sheet metal screws at the perimeter to rib connection is an important element in giving Orbitron antennas their strength and accuracy.

A baked-on, black powder coat finish is used on all parts of the C10. This coating offers excellent protection from rust and corrosion under extreme weather conditions.

Orbitron's horizon-to-horizon mount, shown here, is an available option for this and other Orbitron antennas.

An optional horizon-to-horizon mount is available for the C10. This mount is capable of interfacing with all popular receivers and features ± 0 to .14 degrees pointing accuracy. The mount has snow dumping capability and will not freeze up in winter.

A two year limited warranty covers defects in material and workmanship.

Orbitron antennas are UPS shippable in the USA or Canada.

The following is a list of the antennas available from Orbitron. Call your dealer for more information.

Model	Diameter Ft.	Diameter M	Focal Length	F/D Ratio	Gain dBI 4.2 GHZ	Gain dBI 12.2 GHZ
SX7	6.7	2.0	28.8″	.36	37.3	35.6
SX8.5	8.3	2.5	36″	.36	39.2	46.6
SX10	10.0	3.0	36″	.30	40.5	48.2
C10	10.0	3.0	36″	.30	40.5	48.2
SST10	10.0	3.0	43″	.36	40.5	48.3
SX12	11.7	3.6	50.4″	.36	42.5	49.5
016	16.0	4.9	57.6″	.30	44.8	52.1
T20	20.0	6.1	108″	.45	46.4	53.5
T24	24.0	7.3	108″	.375	47.9	53.8

ORBITRON 351 S. Peterson St., Spring Green, WI 53588
(608) 588-2923 FAX (608) 588-2257 TELEX 262081

ORBITRON

the SX 10

PRECISION ANTENNA

Orbitron quality is demonstrated by every performance characteristic and feature of the SX10. The SX10 is noted for its reception and picture quality. The SX10's superior picture quality is due to the relationship between Orbitron's unique design features and specifications and the attention to detail and craftsmanship shown in the fabrication of every Orbitron antenna. Orbitron's unique stressed frame design and formed, double curvature mesh panels form a rigid, true parabola assuring a sharp, clear picture. SX10 quality is also shown by its superior TI rejection. The SX10 has an F/D ratio of .30, indicating that the SX10 possesses the depth necessary to reject most terrestrial microwave interference. All the features of the SX10 reflect this dedication to a high quality standard in the production of Orbitron antennas. Purchase the SX10 and purchase quality at a competitive low price.

SPECIFICATIONS

Diameter:	**10.0′**	**(3.0m)**
Focal length:	**36″**	**(91.4cm)**
(Measured between front plate and feed focus: 35.75″, 90.8cm)		
F/D ratio:	**.30**	
Gain at 4.2 GHZ:	**40.5 dBI**	
Gain at 12.2 GHZ:	**48.2 dBI**	
Pole size:	**3.5″ O.D.**	**(8.9cm)**
Shipping weight:	**144 lbs.**	**(66 kg)**
Crate size AB:	**65″ x 14″ x 8″**	**(166 x 31 x 21cm)**
C:	**19″ x 10″ x 8″**	**(49 x 26 x 21cm)**
D:	**16″ x 16″ x 22″**	**(41 x 41 x 56cm)**

For more information contact:

Quality

ORBITRON A Division of Greenbriar Products, Inc.
351 S. Peterson St., Spring Green, WI 53588 USA
(608) 588-2923 FAX (608) 588-2257 Telex 262081

THE SX10 FEATURING...

ORBITRON Quality

Orbitron's dedication to quality has produced a relatively low priced, high performance antenna, the SX10. The following features all play their part in the creation of the precision SX10 antenna:

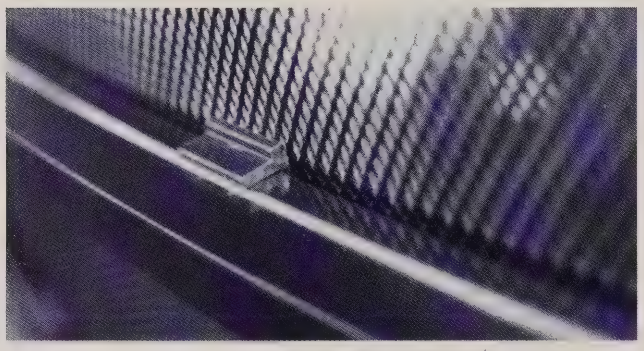
The superior TI rejection shown by the SX10 is due to the antenna's relatively deep dish design. The absence of Terrestrial Interference helps to provide the picture quality Orbitron is known for.

Parabolic stressed frame construction is a primary element in Orbitron's production of a precision C/Ku antenna. Stressed frame construction is dependent on the relationship between the design of the antenna ribs and the method of attaching them to the hub and perimeter ring. After the ribs are fastened to the perimeter ring the hub is tightened, resulting in increased tension on the ribs. This forms a rigid, true parabolic antenna.

The steel "quick hub" allows speedy, single wrench assembly. The hub assembly holds all 18 extruded aluminum ribs in place for the forming of an accurate, parabolic antenna.

A sturdy quad leg or button-hook feed support provides precise centering of the feed horn.

Pre-formed expanded aluminum mesh. These double curvature mesh panels help assure the parabolic accuracy necessary to provide sharp C/Ku reception.

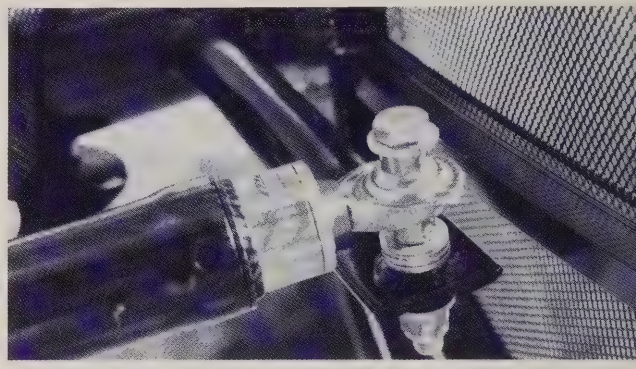


A close-up view of Orbitron's Mesh-Lok design shows how the mesh clip holds the mesh panel in place and how the mesh fits into the rib groove.

The mesh-lok rib design used on the SX10 forces the mesh against the top of the rib groove for better mesh retention. Aluminum clips then snap into the bottom of the mesh grooves to lock the mesh in place.

Built-in rib connectors are located in the end of each rib. These encapsulated square nuts speed assembly. The use of a single 5/16" bolt connection instead of sheet metal screws at the perimeter to rib connection is an important element in giving Orbitron antennas their strength and accuracy.

"Spinclination", an innovation unique to Orbitron antennas, allows accurate and precise declination setting. This is done by simply rotating the antenna to the correct latitude setting on the polar tube declination scale.

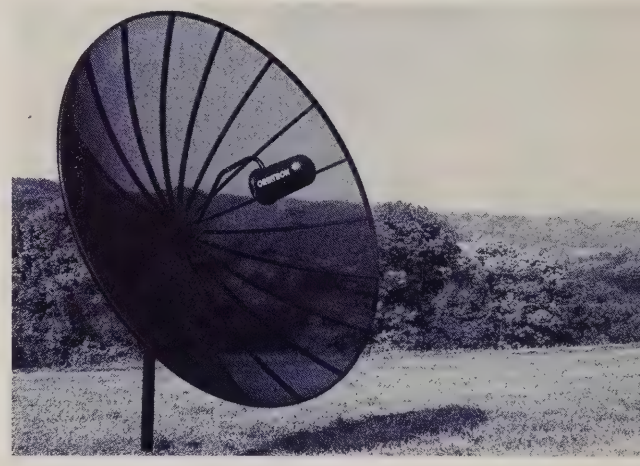


A close-up view of the attachment of the actuator to the actuator arm.

A baked-on, black powder coat finish is used on all parts of the SX10. This coating offers excellent protection from rust and corrosion under extreme weather conditions.

A five year limited warranty covers defects in material and workmanship. Orbitron's commitment to quality extends past the sale of the antenna.

Orbitron antennas are UPS shippable in the USA or Canada.



The SX-10 is also available with a button hook feed support.

An optional horizon-to-horizon mount is available for the SX10. This mount is capable of interfacing with all popular receivers and features ± 0 to .14 degrees pointing accuracy. The mount has snow dumping capability and will not freeze up in winter.

ORBITRON A Division of Greenbriar Products, Inc.
351 S. Peterson St., Spring Green, WI 53588 USA
(608) 588-2923 FAX (608) 588-2257 Telex 262081

ORBITRON

the SX 12

PRECISION ANTENNA

Craftsmanship, a characteristic of every Orbitron antenna, is especially evident in Orbitron's SX12. Orbitron's concern with the integration of design, materials, detail and workmanship has resulted in a superior high gain antenna that offers excellent reception. The SX12 features Orbitron's standard stressed frame design, die formed mesh panels, heavy steel mount and hub, and black powder coat finish. In addition, the SX12 has incorporated two mesh rings to guard against panel blow out and assure stength and parabolic accuracy. Rib clips anchor the eighteen extruded aluminum ribs to the sturdy steel support ring. The SX12 is also available with optional elevation adjustment. This allows tracking of unstable and inclined orbit satellites. An optional horizon-to-horizon mount is also available. Orbitron's dedication to a high level of craftsmanship in bringing design and materials together has resulted in the construction of a superior high performance antenna, the SX12.

SPECIFICATIONS:

Diameter:	**11.7′**	**(3.6m)**		
Focal length:	**50.4″**	**(128.0)**		
(Measured between front plate and feed focus: 50.12″, 127.3 cm)				
F/D ratio:	**.36**			
Gain at 4.2 GHZ:	**42.2 dBI**			
Gain at 12.2 GHZ:	**49.5 dBI**			
Pole size:	**3.5″ O.D.**	**(8.9cm)**		
Shipping weight:	**202 lbs.**	**(82 kg)**		
Crate size AB:	**73″ x 14″ x 6″**	**(186 x 36 x 16cm)**	**D: 15″ x 15″ x 27″**	**(39 x 39 x 69cm)**
C:	**31″ x 32″ x 10″**	**(79 x 82 x 26cm)**	**E: 5″ x 5″ x 75″**	**(13 x 13 x 191cm)**

Craftsmanship

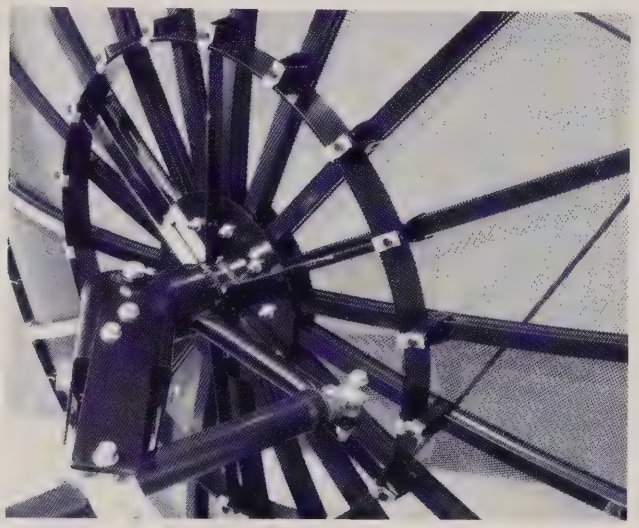
ORBITRON (608) 588-2923 FAX (608) 588-2257 Telex 262081
A Division of Greenbriar Products, Inc. 351 S. Peterson St., Spring Green, WI 53588 USA

THE SX12, FEATURING...

Craftsmanship

Orbitron craftsmanship has produced a sturdy and reliable high gain antenna, the SX12. A high standard of craftsmanship is evident in every one of the following features:

Parabolic stressed frame construction is fundamental to the design and construction of the SX12. After the antenna ribs are fastened to the perimeter ring the hub bolts are tightened, resulting in increased tension on the ribs. This tension forces the antenna into a rigid, true parabola.



This view illustrates the strength and integrated design of the mounting and support structure of the SX12. Shown here are the polar mount, hub, back support ring and rib clips.

The steel "quick hub" mount and back support ring provide sturdy support for the antenna's 18 extruded aluminum ribs.

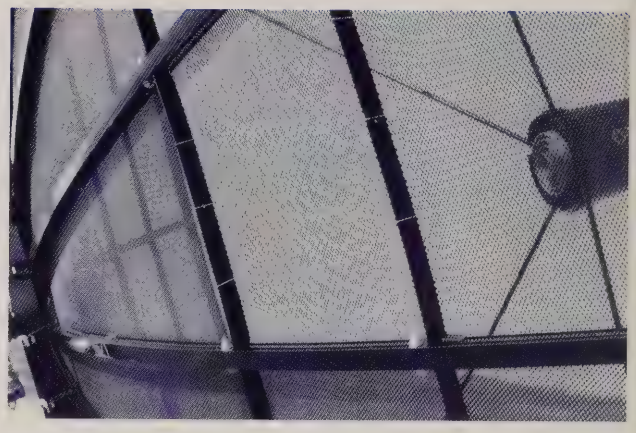
"Spinclination", an Orbitron innovation, affords precise declination setting. This is done by rotating the antenna to the correct latitude setting on the polar tube declination scale.

Die forming of expanded aluminum mesh provides double curvature mesh panels which help to assure the parabolic accuracy necessary to provide sharp C/Ku reception.

The quad leg feed support affords both precise centering of the feed horn and greater antenna strength.

The mesh-lock rib design used on this and other SX series antennas forces the mesh against the top of the rib groove for better mesh retention. Aluminum clips then snap into the bottom of the mesh groove to lock the mesh in place.

Rib clips clamp the ribs to the steel back support ring. This is another guarantee of antenna stability, durability and accuracy.



This profile view of the antenna shows mesh clips in place while J-hooks anchor the mesh to the mesh curves, two of which are bolted between each rib.

Two concentric mesh support rings are formed by individual mesh curves bolting between the ribs. These curves provide anchors for the mesh panels and add strength and rigidity to insure that the mesh maintains a true parabola.

Built-in rib connectors are located in the end of each rib. These encapsulated square nuts speed assembly. The use of a single 5/16" bolt connection instead of sheet metal screws at the perimeter-rib connection is an important factor in the strength and accuracy of the Orbitron antenna.

A baked-on black powder coat finish is used on all parts of the SX12. This coating offers excellent protection from rust and corrosion under most weather conditions.

The SX12 is UPS shippable. This provides the convenience of next day delivery and low UPS rates.

A five year limited warranty covers defects in materials and workmanship.

An optional horizon-to-horizon mount is available for the SX12. This mount is capable of interfacing with all popular receivers and features ± 0 to .14 degrees pointing accuracy. The mount has snow dumping capability and won't freeze up in winter.

An optional special elevation kit is available for the SX12. This kit allows the international customer to track unstable and inclined orbit satellites. The kit is available in a motorized or automatic version.

ORBITRON (608) 588-2923 FAX (608) 588-2257 Telex 262081
A Division of Greenbriar Products, Inc. 351 S. Peterson St., Spring Green, WI 53588 USA

ORBITRON

the 016

PRECISION ANTENNA

Orbitron performance is exemplified by the 016 antenna. The excellent C/Ku reception of the 016 is due to several Orbitron innovations. In addition to Orbitron's unique stressed frame construction the 016 possesses a sturdy quad feed, diagonal rib bracing, dual concentric mesh rings, heavy-duty steel mount, optional horizon-to-horizon mount (the 016 H-H) and motorized elevation adjustment. Together these features guarantee a true parabolic antenna that delivers a sharp, clear picture. The Orbitron 016 antenna is designed for home and commercial use and will appeal to any one looking for a well designed and crafted antenna offering excellent picture quality at a competitive low price.

SPECIFICATIONS:

Diameter:	**16′**	**(4.9m)**
Focal length:	**57.6″**	**(146.3cm)**
F/D ratio:	**.30**	
Gain at 4.2 GHZ:	**44.8**	
Gain at 12.2 GHZ:	**52.1**	
Pole size:	**5.5″ O.D.**	**(14cm)**
Shipping weight:	**820 lbs.**	**(372 kg)**
	(880 w/H-H)	**(400 kg w/H-H)**
Crate size A:	**104″ x 28″ x 10″**	**(265 x 72 x 26cm)**
B:	**50″ x 50″ x 19″**	**(127 x 127 x 49cm)**

For more information contact:

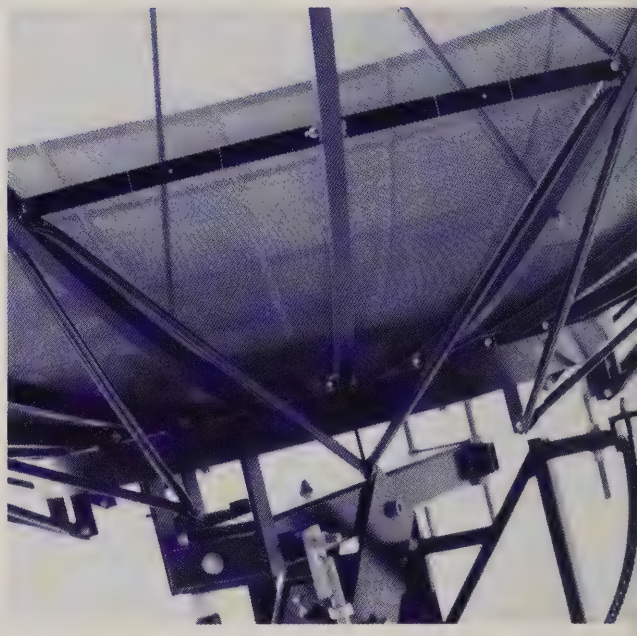
Performance

ORBITRON 351 S. Peterson St., Spring Green, WI 53588
(608) 588-2923 FAX (608) 588-2257 TELEX 262081

THE 016 FEATURING...

ORBITRON Performance

Diagonal bracing reaches out from the ring mount to meet the ribs at the first mesh ring, assuring stability and parabolic accuracy.



This detail shows the integration of the heavy gauge steel ring mount, diagonal rib bracing and parabolic frame.

Orbitron performance standards are a result of the relationship between design, craftsmanship and innovation found in every antenna produced by Orbitron. The following features are just some of the reasons to buy Orbitron.

Parabolic stressed frame construction is the basis of the 016's high performance characteristics. The 48″ diameter steel ring mount and hub assembly hold all 24 extruded aluminum ribs precisely in position. After the ribs are anchored to the perimeter ring the hub is tightened, resulting in increased tension on the ribs. This forms a rigid, true parabolic antenna.

Diagonal rib bracing and dual concentric mesh rings allow for positive engagement of mesh panels and further insure accuracy while adding strength to the antenna.

A sturdy quad feed support adds to antenna strength and helps to provide the sparkle free picture reception Orbitron is known for.

Assembly on the mast without the use of a crane is a design requirement in the remote areas of the world. The heavy-duty polar mount may be adjusted so that every rib and mesh panel can be easily installed by two men.

The 016 H-H comes with a horizon-to-horizon mount, capable of interfacing with all popular receivers. This mount has snow dumping capability and will not freeze up in winter.

A proven leader in tracking CNN International the 016 is also available with an optional motorized elevation adjustment. This allows tracking of CNN and other inclined orbit satellites.

All parts are black powder coated with the exception of the aluminum ribs which are coated with architectural grade baked enamel. These coatings are the best protection available against rust and corrosion.

A 5 year limited warranty covers defects in materials and workmanship.

The following is a list of the antennas available from Orbitron. Call your dealer for more information.

Model	Diameter Ft.	Diameter M	Focal Length	F/D Ratio	Gain dBI 4.2 GHZ	Gain dBI 12.2 GHZ
SX7	6.7	2.0	28.8″	.36	37.3	35.6
SX8.5	8.3	2.5	36″	.36	39.2	46.6
SX10	10.0	3.0	36″	.30	40.5	48.2
C10	10.0	3.0	36″	.30	40.5	48.2
SST10	10.0	3.0	43″	.36	40.5	48.3
SX12	11.7	3.6	50.4″	.36	42.5	49.5
016	16.0	4.9	57.6″	.30	44.8	52.1
T20	20.0	6.1	108″	.45	46.4	53.5
T24	24.0	7.3	108″	.375	47.9	53.8

ORBITRON 351 S. Peterson St., Spring Green, WI 53588
(608) 588-2923 FAX (608) 588-2257 TELEX 262081

ORBITRON

theT 20,T 24

Precision in design and construction is demonstrated by the picture quality and durability of the T20 and T24 antennas. These antennas are identical in design and construction with the exception of the additional two foot length of the trusses, additional set of mesh panels and two additional sets of mesh rings on the T24. These antennas have been designed for commercial and international use. They are especially suited for use by cable TV systems and TV broadcasters as head end antennas or by public institutions and private businesses to feed SMATV systems. The T20 and T24 are adaptable for use in remote locations around the world. The unique hub or spool design of these antennas allows rotation of the antenna during assembly making it possible to assemble the reflector on the tower. The antenna mount and reflector may also be assembled on the ground and then lifted atop the tower by crane. Exact alignment of the truss mounting holes and precision machining of the spool contribute greatly to assuring a true parabola and superior signal reception. Such concern with precision design and machining in all features of the T20 and T24 antennas is a determining factor in providing the purchaser with a superior antenna at a competitive price.

PECIFICATIONS:

)		
ımeter:	20.0′	(6.1m)
:al Length:	108″	(274.3cm)
) Ratio:	.45	
in at 4.2 GHZ:	46.9 dBI	
in at 12.2 GHZ:	53.5 dBI	
ipping Weight:	3150 lbs.	(1429 kg)
ıte Size: A:	93″x50″x41″	(237x127x105cm)
B:	93″x34″x34″	(237x87x87cm)

T24		
Diameter:	24.0′	(7.3m)
Focal Length:	108″	(274.3cm)
F/D Ratio:	.375	
Gain at 4.2 GHZ:	47.9 dBI	
Gain at 12.2 GHZ:	53.8 dBI	
Shipping Weight:	3300 lbs.	(1497 kg)
Crate Size: A:	93″x50″x41″	(237x127x105cm)
B:	93″x34″x34″	(237x87x87cm)

Precision

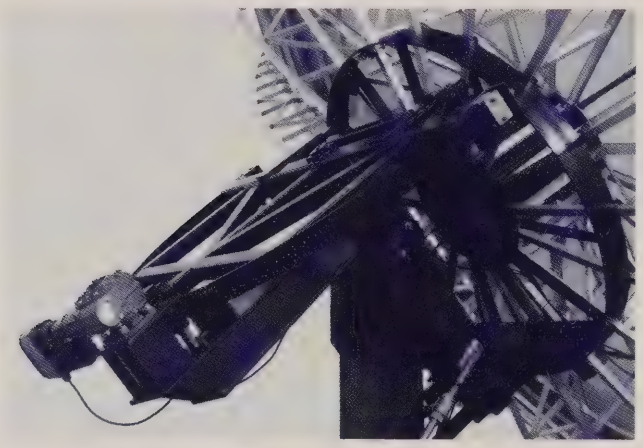
ORBITRON 351 S. Peterson St., Spring Green, WI 53588 USA
(608) 588-2923 FAX (608) 588-2257 Telex 262081

THE T20, T24, FEATURING...

ORBITRON Precision

Orbitron's concern with precision in every step of the design and production process has resulted in antennas that furnish superior reception and reliable performance. The features listed below demonstrate precise planning and execution in all their characteristics. These features are common to both the T20 and T24.

A sturdy steel tower consisting of a central 5⁹⁄₁₆" O.D. pipe, four gusseted, steel tube legs and diagonal bracing is anchored in a concrete pad. This solidly supports the antenna.



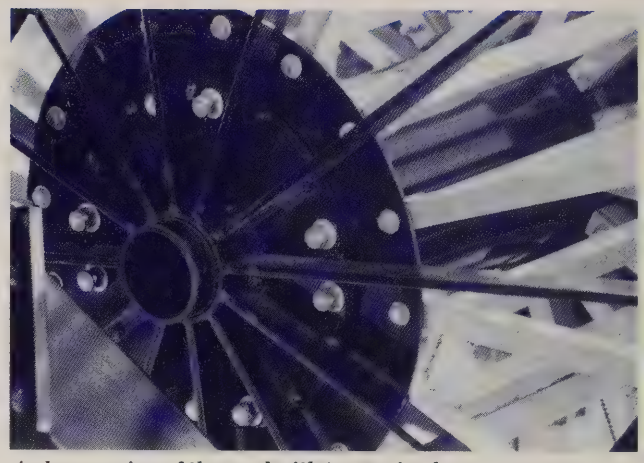
This view of the T24 mount shows the trusses, spool, hub ring, chain driven D ring, D ring drive motor and elevation beam.

A steel hub ring consisting of a heavy outer ring and twelve spokes is attached to the antenna's core or spool. The antenna pivots on this ring and it provides support for the trusses.

Horizon-to-horizon azimuth movement is provided by a double chain driven, steel D-ring. The chain is driven by a 36 volt D.C. motor.

Motorized declination movement allows easy declination adjustment. Motorized declination is superior to motorized elevation movement in that it keeps the antenna always perpendicular to the Clarke belt. This makes it easier to find and track satellites.

Dual axis tracking is a standard feature on these antennas. This feature allows tracking of unstable and inclined orbit satellites.



A close-up view of the spool with trusses in place.

A precision, machined spool functions as the core of the antenna. The trusses are attached to the spool in such a way as to allow the spool to turn on the mount during reflector assembly. This allows assembly of the reflector after the mount has been assembled on the tower. This can be done without the use of a crane, an extremely useful feature in remote areas.

Greasable, self aligning bearings are used for the azimuth pivot bearings. Declination bearings are oil impregnated bronze.

Sixteen welded aluminum trusses, made up of two matched parts, support the reflector.

Nine sets of aluminum mesh rings (seven on the T20), sixteen to a set, are bolted between adjacent trusses. The mesh panels are then attached to the rings with stainless steel hooks. These rings also help support the antenna and maintain parabolic accuracy.

Aluminum mesh panels capable of receiving either C or Ku signals are used.

Aluminum, pre-punched strips are screwed over the top of the mesh panels and into each truss. These strips and the aluminum mesh trim, which clamps around the antenna's perimeter, hold the mesh securely in place.

A quad feed support is used to precisely center the feed and add strength and stability to the antenna.

A black, powder coat finish is found on all steel parts of the antennas. The mesh panels are also powder coated. All other parts are mill finished aluminum.

A five-year limited warranty covers defects in materials and workmanship.

ORBITRON 351 S. Peterson St., Spring Green, WI 53588 USA
(608) 588-2923 FAX (608) 588-2257 Telex 262081

ORBITRON International

THE 7000E
International Receiver

The Orbitron 7000 E receiver is an exceptional value, providing performance comparable to many higher priced receivers. The receiver features a built in antenna positioner with programmable east/west limits, on screen, multi-language graphics, PAL G/I UHF modulator and infrared remote control. Satellite positions can be memorized. Audio and video bandwidth can also be selected.

The 7000 E has dual IF outputs and, with the addition of an external switch, can automatically receive C, Ku and S bands. Video IF bandwidth can be selected for either 18 or 27 MHz to help provide sparkle free reception.

The receiver comes with 350 programmed channels and 30 satellite positions which can be customized to your needs. The receiver also features a preprogrammed data base for all European and Middle Eastern channels from Intelsat 601 at 27.5 West to Asiasat at 105.5 East.

On screen graphics are selectable in twelve languages including: English, French, Portuguese, Spanish, German, Italian, Dutch, Swedish, Norwegian, Danish, Finnish and Polish. This receiver also possesses stereo output, automatic signal peaking, audio muting, audio video scanning, parental lockout and many other features.

The 7000 E is characteristic of the quality satellite reception components that Orbitron International is known for throughout the world. Call or FAX Orbitron today for more information about Orbitron products and complete satellite systems.

Features:

- **Receives C/Ku or S bands**
- **350 Programmable favorite channels** - The menu can be customized at any time
- **On screen graphics**
  Select any one of twelve languages
- **Preprogrammed data base**
  Covers all channels in Europe and the Middle East
- **Stereo audio outputs**
  Tunable from 4.0 to 9.0 MHz
- **Auto signal Peaking**
  Assures the best possible signal reception
- **Dual IF inputs**
  (950 to 2050 MHz) with LNB voltage switching
- **Selectable IF bandwidths**
  18 and 27 MHz
- **Parental lockout**
  Lockout channels to allow viewing by password only
- **Video Timer**
  Automatically selects satellite and channels for prescheduled taping of up to nine events

7000E Receiver

ORBITRON (608) 588-2923 • FAX (608) 588-2257 • Telex 262081
A Division of Greenbriar Products, Inc. • 351 S. Peterson St. • Spring Green, WI 53588 USA

Additional Features

- **PAL G/I type UHF modulator**
  Channels 30 to 39 adjustable with a switched test pattern
- **Antenna positioner**
  36 V DC with 3 amp output
- **Infrared remote control**
  23′ or 7m range
- **SCART decoder socket**
- **MAC and PAL decoder socket**
- **Remote DIN socket**
  Allows memory transfer between receivers
- **V/H LNB switch**
  Used with dual polarity systems
- **Narrow and wide band audio**
  includes noise reduction
- **Servo or magnetic polarizer outputs**
- **AGC output**
  Used in connection of tuning meters and automatic tracking systems
- **220 or 240 V (50Hz)**
  Externally switched
- **Audio muting**
  Accessible through the IR remote
- **Video and audio scanning**

Specifications

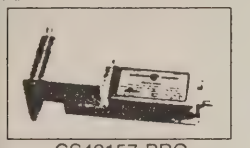
• RF Section	
Input frequency range	950 to 2050 MHz
Dynamic range	-65″ to 30 dBm
Input impedance	75 OHM
IF frequency	479.5 MHz
IF bandwidth	18/27 MHz
AFC	Yes
LNB power	350 mA max.
• Video Section	
Video output level	1 Vpp
Output impedance	75 OHM
Diff. gain/Diff. phase	5% / 5° max
Video format 1	Clamp
Video format 2	Unclamp
Video format 3	Unfilter
Video format 4	Baseband
• Audio Section	
Frequency range	4.00 to 9.11 MHz
Audio IF bandwidth	110/280 KHz
Audio de-emphasis	50us/J17
Dynamic noise reduction	P1
Audio output level	0.7 Vrms
Output impedance	600 OHM
Frequency range	50 to 15000 Hz
• Interfacing	
Video/Audio	
Scarts	2
Sub D-conn.	1
Cinch out video	1
Cinch out audio	2
Polarizer	
Power on IF	13/18/21/24 V
Pulse on IF	0.6 to 2.2 ms
Magnetic polarizer	+/- 85 mA
Mechanical polarizer	0.6 to 2.2 ms
12 V Switch	40 mA
Motor	
Reed motor type	Yes
Opto motor type	Yes
Motor output power	36V@3 Amp
Other	
Remote copy	Yes
AGC out	Yes
• Modulator	
Channel Range	30 to 39 CH
Standard	G/I PAL
Test pattern	Yes
• Power Supply	
Voltage input	220/240 V
Frequency	50 Hz
• Shipping	
Shipping wt.	6.9kgs/15 lbs
Dimensions	495x317x139mm /19x12½x5½″

ORBITRON (608) 588-2923 • FAX (608) 588-2257 • Telex 262081
A Division of Greenbriar Products, Inc. • 351 S. Peterson St. • Spring Green, WI 53588 USA

ORBITRON

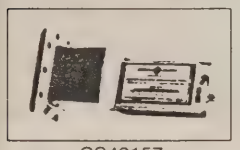
351 S. Peterson Street, Spring Green, Wisconsin USA 53588
608/588-2923 Fax 608/588-2257 Telex 262081

California Amplifier


CS42157-PRO

PROFESSIONAL C-BAND LNB
Input Frequency ..... 3.7 to 4.2 GHz
Output Frequency ..... 950 to 1450 MHz
Noise Temperature @ 25°C ..... 25°K to 40°K
Gain ..... 65 dB Typical
LED Power Indicator ..... Standard

HEMT LOW NOISE AMPLIFIER/ BLOCK DOWN CONVERTER
Input V.S.W.R. ..... 3.0:1 Typical
Output V.S.W.R. ..... 2.0:1 Typical
DC Power Voltage ..... +15 to +28 VDC
Connector Type ..... Type F Female
Warranty ..... 5 Years


CS42157

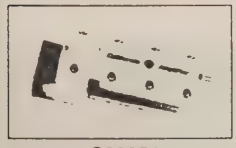
SLIMLINE C-BAND LNB
Input Frequency ..... 3.7 to 4.2 GHz
Output Frequency ..... 950 to 1450 MHz (others avail.)
Noise Temperature @ 25 C ..... 30°K to 50°K
Gain ..... 62 dB Typical (High Gain avail.)
LED Power Indicator ..... Standard

HEMT LOW NOISE AMPLIFIER/ BLOCK DOWN CONVERTER
Input V.S.W.R. ..... 3.0:1 Typical
Output V.S.W.R. ..... 2.0:1 Typical
DC Power Voltage ..... +15 to +28 VDC
Connector Type ..... Type F Female
Warranty ..... 3 Years

C31012-SL

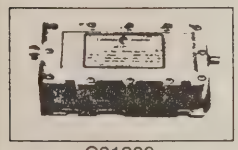
SLIMLINE II C-BAND LNB
Input Frequency ..... 3.7 to 4.2 GHz
Output Frequency ..... 950 to 1450 MHz
Noise Temperature @ 25°C ..... 25°K to 50°K
Gain ..... 62 dB Typical
LED Power Indicator ..... Standard

HEMT LOW NOISE AMPLIFIER/ BLOCK DOWN CONVERTER
Input V.S.W.R. ..... 3.0:1 Typical
Output V.S.W.R. ..... 2.0:1 Typical
DC Power Voltage ..... +15 to +28 VDC
Connector Type ..... Type F Female
Warranty ..... 2 Years


C30954

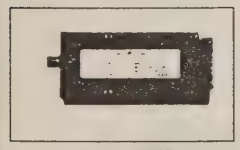
Enterprise Isolated LNB *(Isolated LNA Available)*
Input Frequency ..... 3.7 to 4.2 GHz
Output Frequency ..... 950 to 1450 MHz
Noise Temperature @ 25°C ..... 45° to 65° K
Gain ..... 65 dB Typical, 62 db Minimum
Isolator ..... Yes

HEMT LOW NOISE AMPLIFIER/ BLOCK DOWN CONVERTER
Input VSWR ..... 1.25:1 Typical
Output V.S.W.R. ..... 2.0:1 Typical
DC Power Voltage ..... +15 to +28 VDC
Connector Type ..... Type F Female
Warranty ..... 2 Years


C31203

ARABSAT LNB
Input Frequency ..... 2500 to 2700 MHz
Output Frequency ..... 950 to 1150 MHz
Noise Temperature @ 25°C ..... 0.7 dB Typical
Gain ..... 62 dB Typical
Input/Output V.S.W.R. ..... 2.0:1 Typical

HEMT LOW NOISE AMPLIFIER/ BLOCK DOWN CONVERTER
DC Power Voltage ..... +15 to +28 VDC
Input Connector Type ..... Type N Female
Output Connector Type ..... Type F Female
Warranty ..... 2 Years


KU117HMT

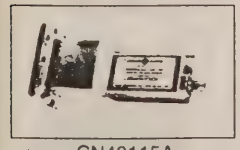
U.S. Ku--Band LNB
Input Frequency ..... 11.70 to 12.20 GHz
Output Frequency ..... 950 to 1450 MHz
Noise Temperature @ 25°C ..... 0.7 to 1.0 dB Typical
Gain ..... 55 dB Typical
LED Power Indicator ..... Standard

HEMT LOW NOISE AMPLIFIER/ BLOCK DOWN CONVERTER
Image Rejection ..... 45 dB Minimum
DC Power Voltage ..... +15 to +28 VDC
Connector Type ..... Type F Female
Warranty ..... 2 Years

C31186

U.S. Ku--Band LNB Pro
Input Frequency ..... 11.70 to 12.20 GHz
Output Frequency ..... 950 to 1450 MHz
Noise Temperature @ 25°C ..... 0.9 to 1.3 dB Typical
Gain ..... 55 dB Typical
LED Power Indicator ..... Standard

HEMT LOW NOISE AMPLIFIER/ BLOCK DOWN CONVERTER
Image Rejection ..... 45 dB Minimum
DC Power Voltage ..... +15 to +28 VDC
Connector Type ..... Type F Female
Warranty ..... 2 Years


CN40115A

Commercial Slimline LNA
Frequency ..... 3.7 to 4.2 GHz
Noise Temperature @ 25°C ..... 30° to 50° K Typical
Gain ..... 55 dB Typical 50 dB Minimum
LED Power Indicator ..... Yes

HEMT LOW NOISE AMPLIFIER
Input V.S.W.R. ..... 2.5:1 Typical
Output V.S.W.R. ..... 1.5:1 Maximum
DC Power Voltage ..... +15 to +28 VDC
Connector Type ..... Type N Female
Warranty ..... 2 Years

C30944

C-Band Downconverter
Input Frequency ..... 3.7 to 4.2 GHz
Output Frequency ..... 950 to 1450 MHz
Gain ..... 18 to 24 dB Typical

BLOCK DOWN CONVERTER
Input Connector Type ..... Type N Female
Output Connector Type ..... Type F Female
Warranty ..... 2 Years

NOTE: *OPERATING TEMPERATURE LIMITS ON ALL UNITS IS -30°C TO + 60°C (-22°F to 140°F).*

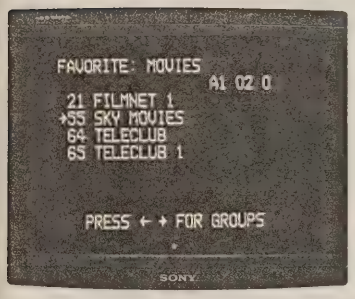
Division of Greenbriar Products, Inc.

Introducing

MONTEREY

MULTI-SATELLITE STEREO RECEIVER

Quite Simply...The Best



Favourite Channels are listed by programme service for quick selection from the on-screen menus.

Monterey's Easy-to-use Remote puts all receiver functions in your hand.

Introducing the new **Monterey Multi-Satellite Stereo Receiver** from **Chaparral**. At last, it's easy to enjoy the best that satellite television has to offer...the movies, the sports and news from around the world. With Monterey, it's simple to select your favourite channels from easy to read on-screen menus. Just press one button and Monterey automatically locates the satellite and selects the appropriate channel and decoder to receive your programme.

The Monterey Receiver is, quite simply, your best investment in home entertainment, because it's future-proof. You can enjoy the widest variety of programmes available...today and tomorrow. Get the best possible picture and sound with features such as:

- **Wegener Stereo** that reproduces the richest sound on television
- **On-Screen Menus & Full-Function Remote** for ease of operation
- **Programmable Audio/Video Switcher** for automatic selection of multiple decoders, VCRs or other components, effortlessly
- **VCR Timer** for unattended recording of programmes
- **Built-in Dish Positioner** for multi-satellite capability

Your wait for the best receiver is over. Just visit your Chaparral dealer for a demonstration of the future-proof, Monterey Multi-Satellite Stereo Receiver. For the name of the dealer nearest you, call:

CHAPARRAL
COMMUNICATIONS

2450 North First St., San Jose, CA 95131

CHAPARRAL COMMUNICATIONS

PRODUCT SHEET

MONTEREY®

MULTI -SATELLITE STEREO RECEIVER

Product Description

The Monterey™ Multi- Satellite Receiver features full Wegener Stereo and is designed for reception o 4, 11 and 12 GHz broadcasts from satellites broadcasting to the U.K., Scandinavia, Europe, North Africa and Asia. The complete list of features makes the new Monterey the most future-proof receiver available

Product Features

On-Screen Menus

The Monterey multi-satellite receiver is easy to use. The clear and simple On-Screen Menus help you with every operation.

Audio/Video Switcher

The Monterey receiver's Audio/Video Switcher allows you to select from four different audio and video sources with a single remote control. This is made possible through the receiver's external inputs, where you can connect multiple external descramblers, a VCR, a laser disc player or even a security camera.

Wegener® Stereo Noise Reduction

The Wegener Panda® I audio noise reduction system is used on a number of popular satellite channels, such as MTV®. The Monterey receiver is equipped with special circuitry to receive these channels in full stereo.

100 Named Favourite Channels

Up to 100 of your favourite satellite channels are pre-programmed in memory for instant recall. The programme names for these channels are shown in the On-Screen Menu and can be customized at any time .

Auxiliary Record Output

Now you can watch your favourite programme while you record it on videotape. Your VCR connects to the Auxiliary Record Output, and the signal is independent of volume changes and on-screen displays.

Dynamic Noise Reduction (DNR®)

The DNR circuitry uses an active filtering network t maintain the clearest sound on every channel.

Programmable VCR Timer

The Monterey receiver can be set to select the satellit and channel for programmes you wish to record on you VCR, even when you're away from home.

Parental Lockout

With the Monterey receiver, you can lock out selecte channels to control which programmes can be viewe with the use of your own secret password.

Four-Stage Bandwidth Filters

Four different bandwidths are available to deliver th best possible picture on every channel.

AutoTune™

The Monterey receiver can fine-tune the dish positior feedhorn polarity and video frequency with the touch o a button. You're sure to get a terrific picture every time

Built-in Dish Positioner with AutoTrack™

The Monterey's integrated dish positioner means there only one box inside for the cleanest installation. An with AutoTrack™, after you find the first two satellite the receiver locates the rest automatically, thu reducing installation time.

Product Specifications

Input Frequency	950-1750 MHz
IF Frequency	70 MHz
IF Bandwidth	14, 20 26 or 36 MHz, Selectable
Video De-emphasis	CCIR 405-1, 625 Lines
Frequency Response	10 Hz to 8.5 MHz
Audio BAndwidth	130 KHz, 260 KHz or 600 KHz
Audio Modes	Mono, Discrete, J17 or Wegener Stereo
Audio De-emphasis	50 µsecond
Wegener De-emphasis	50 or 75 µsec, Selectable
Frequency Response	10 Hz to 15 KHz, +0dB/-3dB
V/H Terminal	0/12 Volt,@ 200 mA, Switchable
Accessory Terminal	0/12 Volt,@ 200 mA, Switchable
Polarotor Terminals	+5 VDC,.8 to 2.2msec TTL Pulse
Aux. Power Terminal	12 VDC @ 100mA
Dish Motor Terminals	24 VDC RMS, ±2 VDC
Dish Sensor Input	Reed Switch or Hall Effect
Input Power	220 or 240 Volt AC, 50 Hz

Monterey and AutoTrack are trademarks of Chaparral Communications, Inc.
All Specificatrions Subject to Change Without Notice

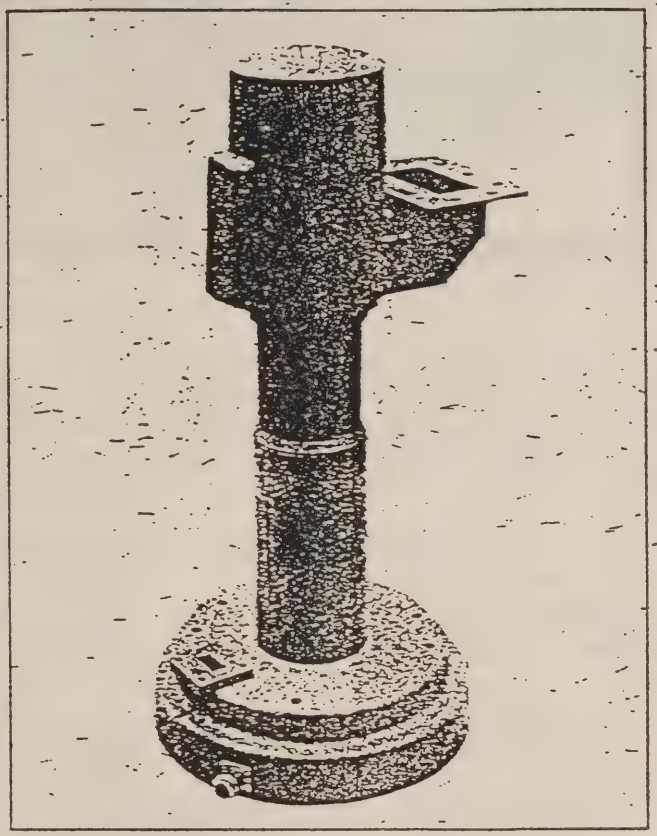
CHAPARRAL COMMUNICATIONS
2450 North First St., San Jose, CA 95131 (408) 435-15

™ Panda I is a trademark of Wegener Communications, Inc.
™ Dynamic Noise Reduction is a trademark of National Semicondu

NATIONAL A.D.L. ENTERPRISES

PRO-LINE SERIES

RP1 CP400-CKUS*



TRIPLE BAND™ PRO-LINE

C Band, KU Band, & S Band, TRI BORSIGHT FEED. The most advanced antenna feed ever introduced to the World TVRO market using the Patented Technologies developed by A.D.L. The TRIPLE BAND™ will receive Circular C Band, or Linear C Band polarized signals. The KU Band will receive linear or circular polarized signals (see Option OP-502) and Arab-sat S Band linear signals that are manually selected for vertical or horizontal. What is remarkable, is that all three bands of frequency are received in the center waveguide simultaneously or as desired. There is no C Band loss, no KU Band loss, and no S band loss. It's like having three different antenna feeds at borsight.

SPECIFICATIONS FOR C BAND

MODEL	RP1 CP400-CKU-S*
F/D RANGE	0.335 TO 0.425
FREQUENCY	3.7 TO 4.2 GHz
VSWR	1.45 AVERAGE OVER BAND
RF PORT	WR-229
POLARIZATION ISOLATION	25 dB
POLARIZATION FORMAT	CIRCULAR RHC/LHC LINEAR V/H
POLARIZATION OPERATION	3 WIRE SERVO TYPE +5 VDC
ROTATION	180° ±15° (3 wire servo)
FEED MOUNTING	3 & 4 HOLE PATTERN ¼" ON A 5.750" B.C.
PAINT TYPE	POWDER COATED
PAINT COLOR	GRAY
WEIGHT	4.0 Lbs.

FEATURES TRIPLE BAND™

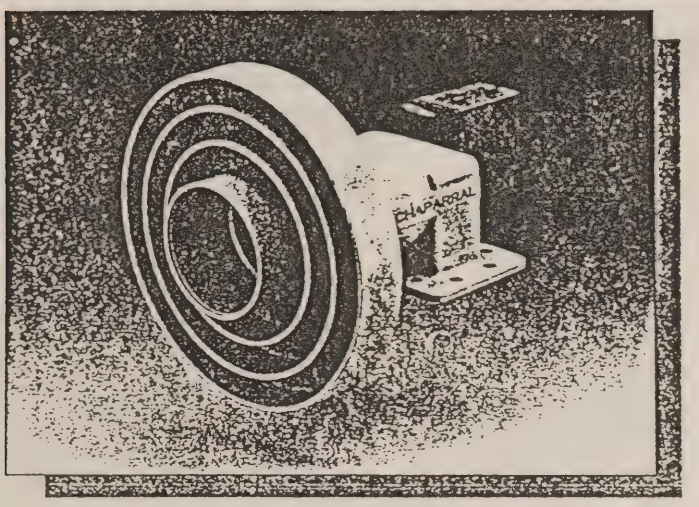
- Feed made in the USA (see page A1)
- *Patended dual frequency microwave feed assembly (see page A2)
- Dual hybrid moding
- Controls "IT" interference
- No parts to install or change from one F/D ratio to another
- Gray powder coated paint and oven baked to 400°F (see page A3)
- Servo motor 100% tested (see page A4)
- Precision die cast quarter wave plates to obtain circular polarization corrections
- Precision waveguide flange with water tight gasket
- Precision 90° elbow built in
- Precision probe and probe holder are high performance and an exclusive A.D.L. design
- Thermal insulator between feed and servo motor helps eliminate motor freeze-up in cold weather and overheating in hot weather, includes servo motor cover
- The motor mount pad is raised, helps prevent water from entering the feed
- Feed mounting holes are ¼". One set 4 hole pattern and one set 3 hole pattern on a 5.750" B.C.
- No scaler ring to adjust

SPECIFICATIONS FOR KU BAND

MODEL	RP1 CP400-CKU-S*
FREQUENCY	11.7 TO 12.2 OR 10.95 TO 12.2 GHz
VSWR	1.45 AVERAGE OVER BAND
RF PORT	WR-75
POLARIZATION ISOLATION	25 dB
POLARIZATION FORMAT	LINEAR V/H
POLARIZATION OPERATION	C BAND MOTOR
ROTATION	180° ±15° (3 wire servo)
MOUNTING	CO-BORSIGHT IN CENTER OF C BAND
PAINT TYPE	POWDER COATED
PAINT COLOR	GRAY & GOLD ANODIZED
WEIGHT	3 Lbs.
OPTION	OP-502

SPECIFICATIONS FOR S BAND

MODEL	RP1 CP400-CKU-S*
FREQUENCY	2.540 TO 2.580 GHz
VSWR	1.45 AVERAGE OVER BAND
RF PORT	FEMALE "N" CONNECTOR
POLARIZATION ISOLATION	40 dB
POLARIZATION FORMAT	LINEAR V/H
POLARIZATION OPERATION	MANUAL
MOUNTING	CO-BORSIGHT IN CENTER OF C BAND
PAINT TYPE	POWDER COATED
PAINT COLOR	GRAY
WEIGHT	3 Lbs.
OPTION	OP-115

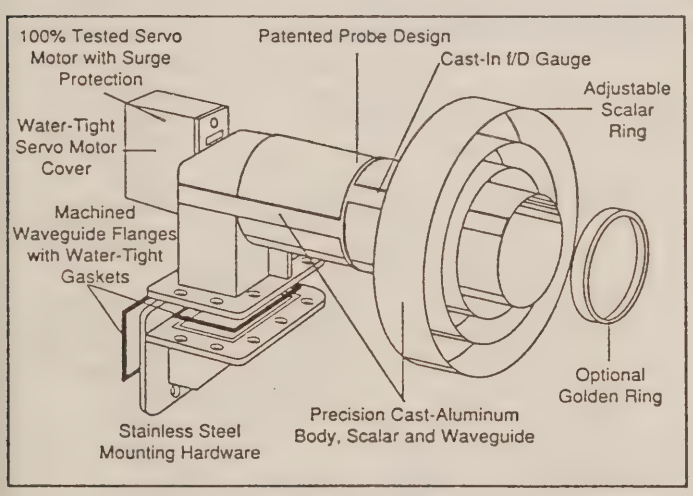


Polarotor® I-E
Polarotor I-E/A
Polarotor I-A

C-Band Feedhorn

Description

The Chaparral Polarotor® I is the world's best-selling satellite system feedhorn. It is based on Chaparral's original design of a carefully tuned C-band (3.7-4.2 GHz) scalar horn, fitted with a servo-controlled probe of Chaparral's patented design. In use for nearly a decade in millions of home satellite systems, cable TV systems, businesses and institutions throughout the world, the Polarotor I has earned the reputation as the best-performing C-band feedhorn available.


100% Tested Servo Motor with Surge Protection
Patented Probe Design
Cast-In f/D Gauge
Adjustable Scalar Ring
Water-Tight Servo Motor Cover
Machined Waveguide Flanges with Water-Tight Gaskets
Optional Golden Ring
Stainless Steel Mounting Hardware
Precision Cast-Aluminum Body, Scalar and Waveguide

Applications

The Polarotor I is available in three models: The **Polarotor I-E** is the economy model, with a fixed scalar design and one-piece casting. This feedhorn is in use in more satellite systems than any other component made today.

The **Polarotor I Economy-Adjustable** feed features an adjustable scalar and is compatible with dishes from .33 to .45 f/D. The scalar position matches the curvature of the dish for peak signal reception. When equipped with the optional Chaparral **Golden Ring™**, the feed can match dishes as deep as .28 f/D.

The adjustable scalar and Golden Ring are standard in the **Polarotor I-A** model, which also features a two year limited warranty. For the best possible signal reception, terrestrial interference rejection and years of trouble-free operation, the Polarotor I-A has no equal.

Features

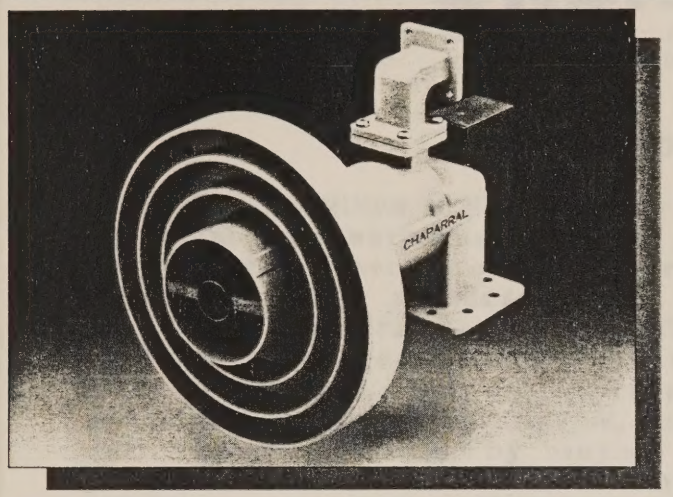
- 100% Made in America
- Patented Probe Design
- Precision Cast-Aluminum Body, Scalar and Waveguide
- Machined Waveguide Flange with Water-Tight Gaskets
- 100% Tested Servo Motor with Surge Protection
- Microwave Transparent Throat Cover
- Stainless Steel Mounting Hardware
- Durable Flake-Resistant Finish
- Mounts to Single-Pole, Tripod and Quadpod Supports
- Cast-in f/D Gauge
- Polar Axis Alignment Tool
- Adjustable Scalar (Economy-Adjustable & I-A)
- Scotchlok® Connectors
- Servo Motor Weather Cover (I-A only)

Specifications

Part Numbers:	
Polarotor I E:	11-1427-1
Polarotor I E/A:	11-4221-1
Polarotor I-A:	11-1434-1
Power Requirements:	+5 V DC & TTL Logic Pulse
Frequency Range:	3.7 to 4.2 GHz
f/D Range:	.33 to .45 (.28 to .33 w/ Golden Ring)
Cross Polarity Isolation:	35 dB
VSWR:	1.25 to 1
RF Port:	WR229 Compatible
Temp. Range:	-50°F to 175°F
Size & Weight:	6.5" diameter x 8.13" / 2.7 lbs.
Warranty:	I E & I E-A: One year / I-A: Two years

© Copyright 1991, Chaparral Communications, Inc.
Specifications subject to change without notice.
Polarotor is a registered trademark of Chaparral Communications, Inc.
Golden Ring is a trademark of Chaparral Communications, Inc.
Scotchlok is a registered trademark of 3M Corporation.

CHAPARRAL COMMUNICATIONS
2450 North First St., San Jose, CA 95131 (408) 435-1530

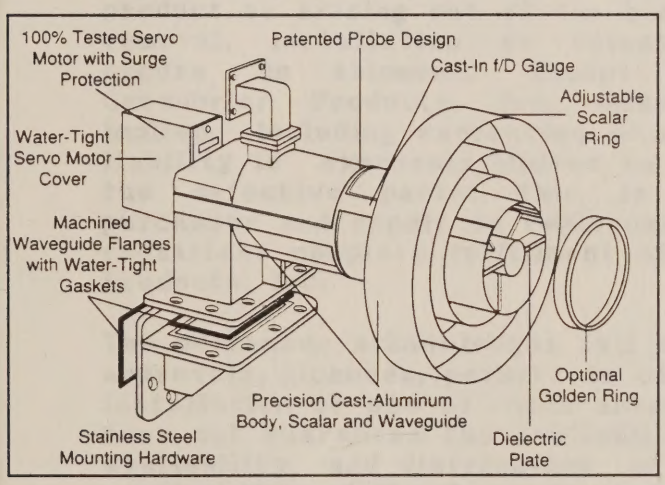


Corotor® II International

Dual-Band Feedhorn

Description

The Chaparral Corotor® II International feedhorn is available in two models for reception of international satellite broadcasts in C and Ku frequency bands. Reception of all available signal polarities is possible with Chaparral's patented servo-controlled probe. Due to its superior performance, compact design and ease of installation, the Corotor II International feedhorn has become the standard for reception of signals from both C and Ku satellites throughout the world.


100% Tested Servo Motor with Surge Protection
Patented Probe Design
Cast-In f/D Gauge
Adjustable Scalar Ring
Water-Tight Servo Motor Cover
Machined Waveguide Flanges with Water-Tight Gaskets
Optional Golden Ring
Precision Cast-Aluminum Body, Scalar and Waveguide
Stainless Steel Mounting Hardware
Dielectric Plate

Applications

The **4/11 Corotor II International** feedhorn is designed for reception of C-band (3.7–4.2 GHz) circular-polarity and Ku-band (10.95–11.7 GHz) linear-polarity signals, which are available from satellites broadcasting to the U.K., Scandinavia and Europe.

The **4/12 Corotor II International** feedhorn receives C-band (3.7–4.2 GHz) circular-polarity and Ku-band (11.7–12.75 GHz) linear-polarity signals available from satellites worldwide.

The **Corotor II International** feedhorn is designed for use with prime-focus reflectors only. It is also available without circular polarization for C-band signals. Inquire with Chaparral International Sales.

Features

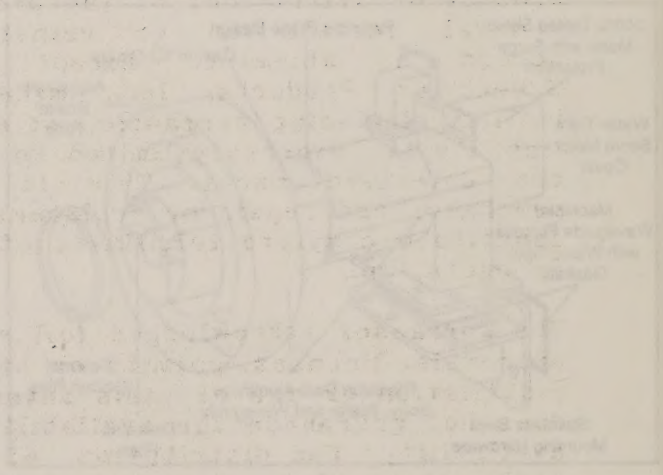
- 100% Made in America
- Patented Probe Design
- Precision Cast-Aluminum Construction
- Machined Waveguide Flanges with Water-Tight Gaskets
- 100% Tested Servo Motor with Surge Protection
- Microwave-Transparent Throat Cover
- Stainless Steel Mounting Hardware
- Durable Flake-Resistant Coating
- Mounts to Single-Pole, Tripod and Quadpod Supports
- Cast-in f/D Gauge
- Polar Axis Alignment Tool
- Adjustable Scalar Ring to Fit a Variety of Reflectors
- Scotchlok® Waterproof Wiring Connectors
- Optional Golden Ring™ for Deep (.28-.32 f/D) Dishes

Specifications

Part Numbers:	
4/11 Corotor II:	11-4095-1
4/12 Corotor II:	11-4095-2
Power Requirements:	+5 VDC and TTL Logic Pulse
Frequency Ranges:	
4/11 Corotor II:	3.7 to 4.2 circ. & 10.95 to 11.7 GHz linear
4/12Corotor II:	3.7 to 4.2 circ. & 11.7 to 12.75 GHz linear
f/D Range:	.32 to .45 f/D (.28 to .32 with Golden Ring)
Cross Pol. Isolation:	25 dB
VSWR:	1.4 to 1
RF Ports:	C-band: WR229 / Ku-band: WR75
Temperature Range:	-40°C to +60°C
Size & Weight:	16.51 x 17.78 x 24.13 cm /1.19 Kg
Warranty:	One year

© 1991, Chaparral Communications, Inc.
Specifications subject to change without notice.
Corotor is a registered trademark of Chaparral Communications, Inc.
Golden Ring is a trademark of Chaparral Communications, Inc.
Scotchlok is a registered trademark of 3M Corporation.

CHAPARRAL COMMUNICATIONS
2450 North First St., San Jose, CA 95131 (408) 435-1530



ORBITRON

351 S. Peterson Street, Spring Green, Wisconsin USA 53588
608/588-2923 Fax 608/588-2257 Telex 262081

ORBITRON LIMITED WARRANTY

ORBITRON ALUMINUM MESH ANTENNAS are warranted against defects in material and workmanship under conditions of normal use and service for a period of five years (two years for the C-10) from the date of purchase from Greenbriar Products, Inc., an authorized distributor or satellite dealer. This warranty does not cover damage or failure caused by, or attributable to, Acts of God, abuse, misuse, improper or abnormal usage, improper assembly, improper installation, improper maintenance, lightning, or repairs provided by anyone other than Greenbriar Products, Inc., or transportation costs. Any part of the ORBITRON mount or antenna found to be defective in materials or workmanship upon examination by Greenbriar Products, Inc., will be repaired or replaced at the option of Greenbriar Products, Inc., free of charge when delivered freight prepaid to our factory. Transportation to and from the factory must be paid by the purchaser. Greenbriar Products, Inc., is not responsible or liable for indirect, special, or consequential damages arising out of, or in connection with, the use or performance of the product or arising out of the breach of this warranty or costs of removal, installation or reinstallation, or for damage which occurs in shipment. Except as expressly implied herein, Greenbriar Products, Inc., makes no warranties, express or implied, including warranties of merchantability. The company's liability is expressly limited to the repair or replacement of the defective parts. This is the exclusive remedy of the purchaser and repair or replacement of the defective part shall constitute complete fulfillment of the obligations of Greenbriar Products, Inc.

The purchaser acknowledges full responsibility for obtaining any approvals, licenses, permits or other authorization necessary for installation or use of this antenna. Greenbriar Products, Inc., does not guarantee the availability or positioning of satellites, availability and distribution of satellite programming or the continuation of the foregoing existing at the time of purchase.

Some states do not allow the limitation or exclusion of incidental or consequential damages and some states do not allow exclusion of implied warranties; therefore, the aforesaid limitations or exclusions may not apply to the purchaser. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

GREENBRIAR PRODUCTS
351 S. Peterson St., Spring Green, WI USA 53588
(608) 588-2923